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Machining of thermosetting composites by means of milling and drilling

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Abstract

Polymer composites are widely spread in machinery, construction activity, incl. production of wear plates and items of fitting systems. In process of manufacturing items from composites, the products must be machined by tools and cutters. During cutting, with mechanical and thermal loads applied, the destruction of composites takes place to deteriorate quality of products. To increase quality of products, the procedures of cutting modes calculation should be developed with introduction of correction factors considering specific properties of polymers, as well as their optimization with usage of multi-criteria methods. © IDOSI Publications, 2013.

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Keywords

Cutting mode models, Machining by means of milling and drilling, Machining modes optimisation, Physical-mechanical and technological properties, Polymer composites, Quality of product